FIG. 1A
PRIOR ART

| MC | fout |
|----|------|
| 0 | fin/64 |
| 1 | fin/65 |

FIG. 1B
PRIOR ART

FIG. 2

a=b=c=0

div16

div32

div64

div128

Fout

# FIG. 3A

a=1, b=c=0

div16

div32

div64

div128

Fout

# FIG. 3B

a=b=1, c=0

div16

div32

div64

div128

Fout

# FIG. 3C

a=b=c=1

div16

div32

div64

div128

Fout
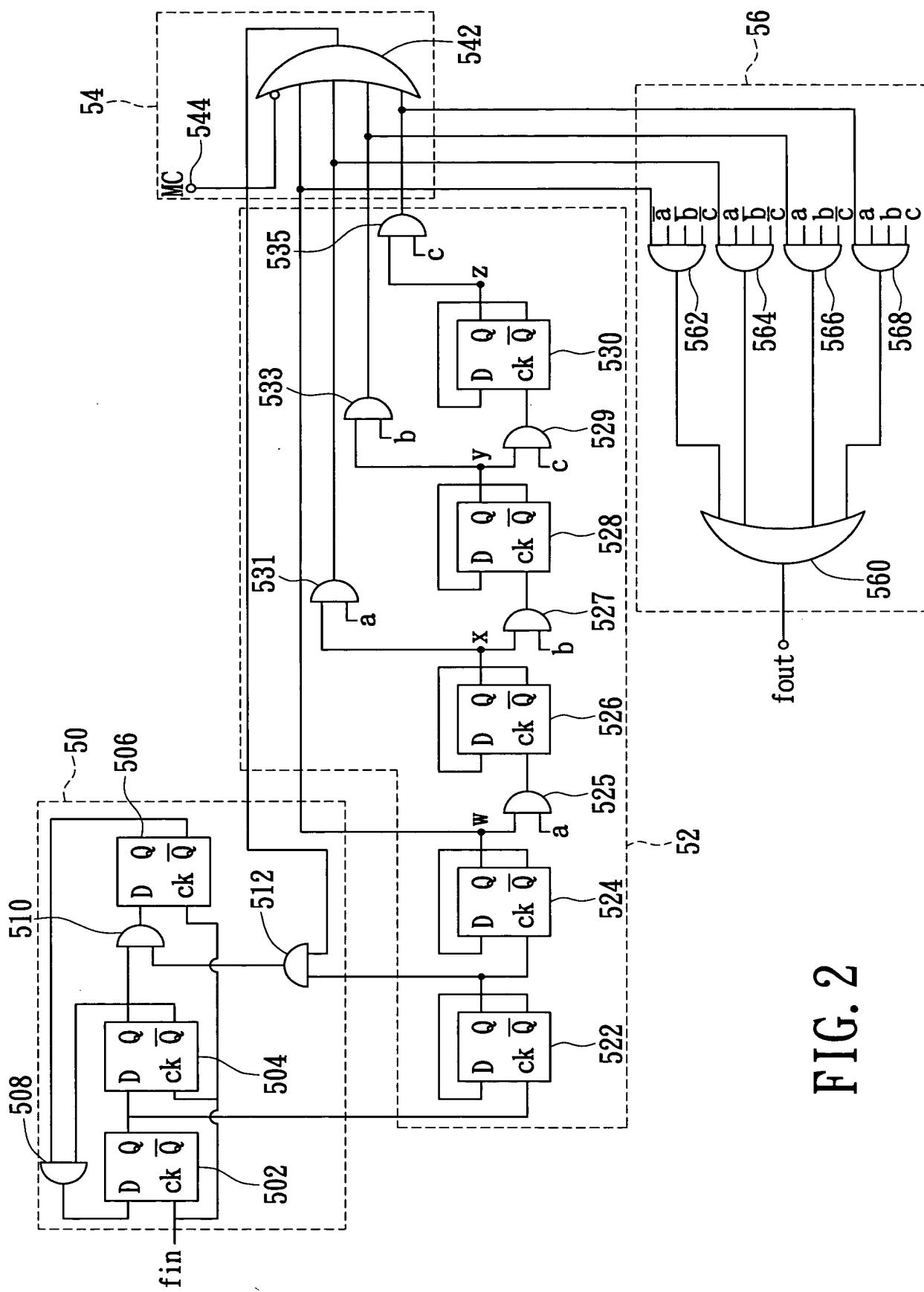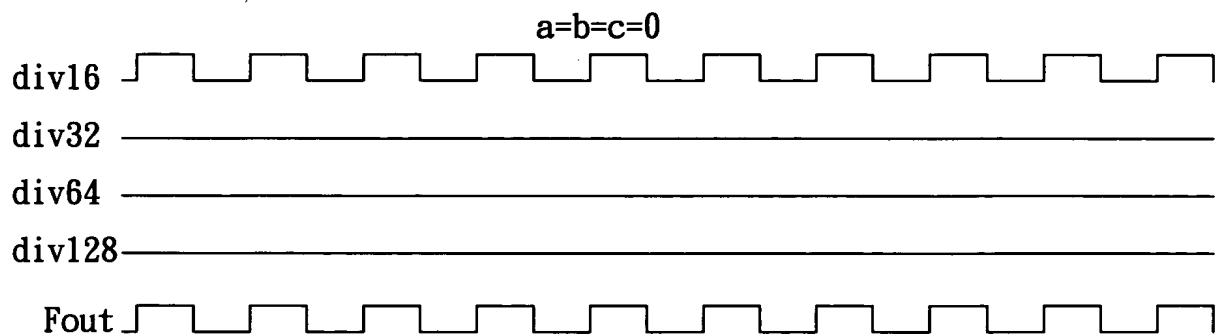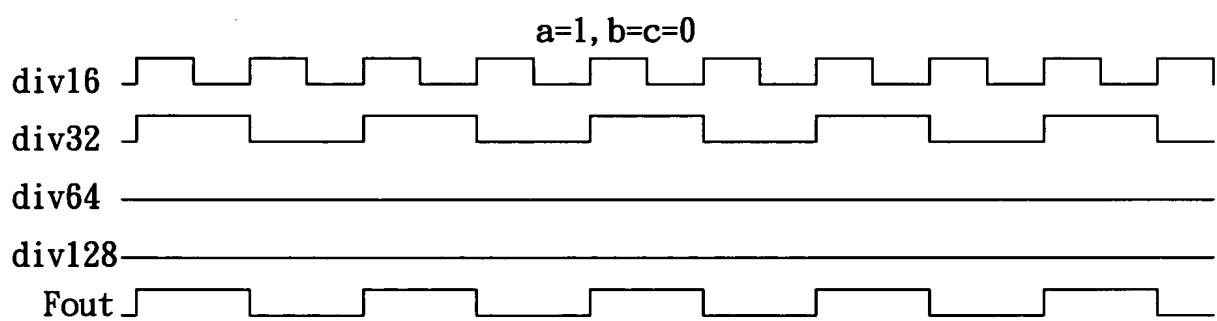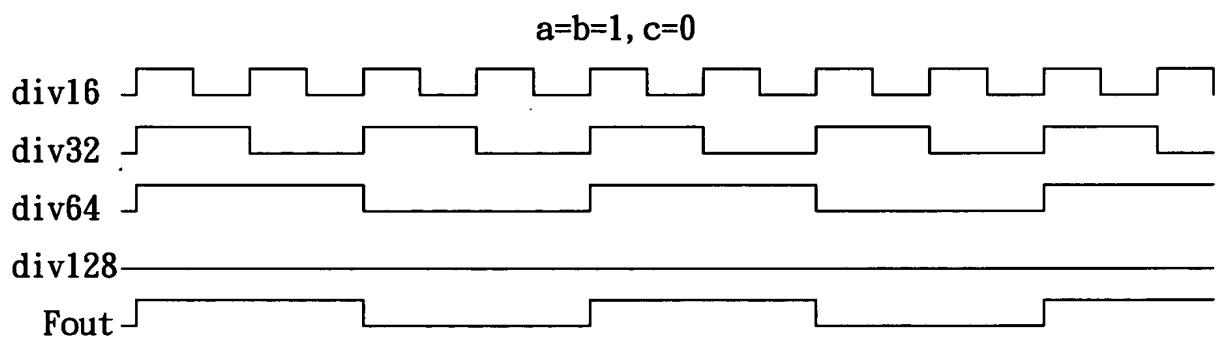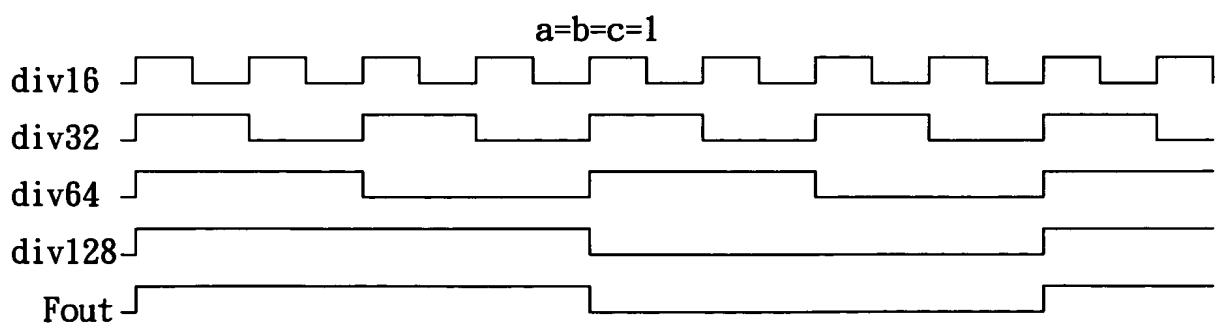
# FIG. 3D

Truth Table

| MC | a | b | c | output |
|----|---|---|---|--------|
| 0 | 0 | 0 | 0 | div 16 |
| 1 | 0 | 0 | 0 | div 17 |
| 0 | 1 | 0 | 0 | div 32 |
| 1 | 1 | 0 | 0 | div 33 |
| 0 | 1 | 1 | 0 | div 64 |
| 1 | 1 | 1 | 0 | div 65 |
| 0 | 1 | 1 | 1 | div 128 |
| 1 | 1 | 1 | 1 | div 129 |

FIG. 4